

The final five chapters make up Part 3 of the book, the "Mutual Accommodation Process." Important topics such as boundary roles, accommodation, conflict, networks, and culture are explored. The discussion of public sector organizations interfacing with other constituencies is creative, and the network chapter provides a helpful summary of the sociological work in that area in the 1960s and 1970s. A more thorough consideration of the conditions that affect various types of accommodation would improve chapter 8. The chapter on conflict would benefit from inclusion of the literature on negotiation, and the chapter on culture should be updated, given an era of global markets.

Integrative books analyzing a field as complex as the study of organizations are difficult to write. Although handicapped by a number of shortcomings, this book could be useful for new students of organizations interested in sampling many of the key works or as a reference book for those already familiar with the field.

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REFERENCE

- Astley, W. Graham, and Andrew
Van de Ven
1983 "Central perspectives and debates in organization theory."
Administrative Science Quarterly, 28: 245-273.

Other Reviews

Taking Risks: The Management of Uncertainty.

Kenneth R. MacCrimmon and Donald A. Wehrung, with William T. Stanbury. New York: Free Press, 1986. 380 pp. \$25.95.

Business executives think about risk differently than theorists do. Theorists have been rather unresponsive to this gap, perhaps because there are few carefully collected data on how executives think about risk. This book, however, is full of data, taken from 500 high-level Canadian and American executives.

In expected utility theory, attitudes toward risk are captured by curvature of the utility function: since a risk-averse person always dislikes increasing variation of possible outcomes, variation is a natural measure of risk. Executives think of risk much differently. To them, risk involves dimensions like the potential and magnitude of loss, controllability, and knowledge.

MacCrimmon and Wehrung measured risk taking in many ways. They used four sets of standardized questions with a theoretical grounding, like ranking financial gambles with clear probabilities and outcomes. They also used several "natural" measures of risk taking, like psychometric measures of internal control drive and self-reported gambling behavior, and

they measured personal characteristics like age. Their concern is how well different risk-taking measures correlate with theoretical measures like variation and with other measures.

The most distinctive part of the book, chapter 3, offers subjects a series of simple pairwise choices (e.g., a loss of \$.8 million vs. a .5 chance of losing \$1.6 million) disguised in vignettes as "in-basket memos" to a fictional boss. A lot is learned by having executives comment on how they would handle the problems that have these pairwise choices at their core. They typically don't make a simple choice; they stall, look for more data, and bargain when possible. When they do choose, they take substantially more risks than when facing gambles stripped of context, especially when taking a risk is the only way to prevent a loss.

Their other standardized instruments are more typical, plain gambles for (real!) money. Such gambles are as basic to decision-making research as fruit flies are to genetics, but the status of their subjects and the stakes involved (including \$200 losses and \$400 gains) are unique. Their findings here replicate many well-known results: People are mostly risk-averse; expected return is an important determinant of choice (in chapter 5, the *only* determinant); and executives do *not* always minimize variation—they like it when potential loss is fixed or when they are choosing among gambles with only good outcomes.

These observations are hard to reconcile with expected utility theory or with axiomatic generalizations of it that are fashionable in economics (Machina, 1987; Camerer, 1988a). The authors suggest that a multidimensional concept of risk is needed: People trade off expected return and "degree of threat," which includes likelihood and magnitude of loss controllability, etc. In much the same way, Slovic, Fischhoff, and Lichtenstein (1980) found that the public worries about many features of technological risks other than expected lives lost (the policymakers' criterion), such as the dread and fear caused by a risk and the magnitude of potential disaster. The careful identification of the analogous factors in executives' judgments of riskiness, like that in chapter 4 here, and the link between judgments of riskiness and choice—the tricky part—are important contributions.

An important theme in the book is the intercorrelation of various measures of risk taking. Measures from the same instrument or closely related instruments (e.g., measures of sensation seeking and control drive, widely used by psychologists) are modestly correlated, as we would hope. Different instruments and natural measures are only weakly correlated (around .10, though many are statistically significant). Like most personality traits, risk taking appears to predict poorly a person's behavior across situations (cf. Camerer, 1988b).

MacCrimmon and Wehrung report several striking correlations between risk taking and personal characteristics. Younger, better-educated, and richer executives with fewer dependents and more authority take more risks. The question of causality raised by these correlations is fascinating—Does corporate success create risk taking or vice versa?—but is impossible to answer with their data. The original motive for the study was to learn whether Canadians take fewer risks

than Americans. Executives of both nationalities believe this myth, but it is not true. Their myth-busting result is not due to weak test power, because other stereotypes do hold: Bankers take fewer risks, venture capitalists more.

The study is thorough and careful. Critics sometimes say of a lavish big-budget movie, "You see the money on the screen." You can see the time this book took—more than a decade—on its pages. Painstaking technical notes are sprinkled throughout the text, set in smaller type so the nontechnical reader can avoid them more easily. References to related work are extensive. These features make the book required reading for graduate students and specialists interested in managerial behavior or choice theory. They will find no better example of empirical work, with much helpful detail about sample design and instrument construction, including a 30-page appendix of selected instruments.

Managers may not find the entire book so useful, except for chapter 12, which is a do-it-yourself kit for assessing risk-taking propensity. Most of the writing is methodical and straightforward, and spiceless lists of results are common, especially in later chapters. Summaries of many of their findings, however, can be found in MacCrimmon et al. (1980), MacCrimmon and Wehrung (1984), and March and Shapira (1987).

MacCrimmon and Wehrung have done an important study. They offer no simple formula for understanding risk, but they offer evidence that no simple formulas will do and some suggestions for how to complicate the simple formulas.

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REFERENCES

Camerer, Colin F.

1988a "An experimental test of several generalized utility theories." *Journal of Risk and Uncertainty*, 1: 359–402.

1988b "Illusory correlations in perceptions and predictions of organizational traits." *Journal of Behavioral Decision Making*, 1: 77–94.

MacCrimmon, Kenneth R., William T. Stanbury, and Donald A. Wehrung

1980 "Real money lotteries: A study of ideal risk, context effects, and simple processes." In T. S. Wallsten (ed.), *Cognitive Processes in Choice and Decision Behavior*: 155–177. Hillsdale, NJ: Lawrence Erlbaum.

MacCrimmon, Kenneth R., and Donald A. Wehrung

1984 "The risk in-basket." *Journal of Business*, 57: 367–387.

Machina, Mark

1987 "Choice under uncertainty: Problems solved and unsolved." *Journal of Economic Perspectives*, 1: 121–154.

March, James G., and Zur Shapira

1987 "Managerial perspectives on risk and risk taking." *Management Science*, 33: 1404–1418.

Slovic, Paul, Baruch Fischhoff, and Sarah Lichtenstein

1980 "Facts versus fears: Understanding perceived risk." In R. C. Schwing and W. A. Albers, Jr. (eds.), *Societal Risk Assessment: How Safe is Safe Enough?*: 181–216. New York: Plenum.